

DuPont™ Teflon® AF

FLUOROPOLYMER RESIN

Product Information

Processing Guide

Making Solutions of DuPont™ Teflon® AF

All known commercially available solvents for Teflon® AF are perfluorinated. Those with higher boiling points tend to be poorer solvents for the polymer at room temperature. Solubility however increases with temperature.

Typical Procedure

Weigh out polymer and perfluorinated solvent into a clean sealed container. For rolling agitation we recommend bottles certified to be pre-cleaned to 5 microns particle size. As an example for FC-40* the maximum solubility at room temperature for each grade of Teflon® AF is:

Resin Grade	Nominal Solubility, Wt % Polymer	Time to Dissolve (via Rolling)
2400	1	1 week
1600	3	4 days
1601	18	2-3 days

Solutions should be filtered to remove any gel particles. For 1% and 3% solutions we recommend a 2.5 micron filter. For 18% solutions we suggest a 4.5 micron filter. Examples of filters which have shown to be successful are made by the Pall Ultrafine Filtration Company of East Hills, New York, 11548 (phone 516-484-5400). Recommended filters should be certified pharmaceutical grade in plastic self-contained assemblies (Rated at 75 psig for liquids and 50 psig for gases. Temperature range of 32°F to 100°F). We have had good experience limiting filtration pressures to less than 20 psig.

After solutions are prepared and filtered, containers may be filled in a clean room environment to minimize airborne contamination.

* Product of the 3M Company



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For more information call (302) 479-7731

www.teflon.com

**DuPont Fluoroproducts
P.O. Box 80713
Wilmington, DE 19880-0713**

Europe

DuPont de Nemours Int'l SA
DuPont Fluoroproducts
2, chemin du Pavillon
P.O. Box 50
CH-1218 Le Grand-Saconnex
Geneva, Switzerland

Japan

DuPont Mitsui Fluorochemicals
Co., Ltd.
Chiyoda Honsha Building
5-18, Sarugaku-cho 1-chome
Chiyoda-ku, Tokyo 101 Japan
81-3-5281-5872

Asia Pacific

DuPont China, Limited
26/F., Tower 6, The Gateway
9 Canton Road, Tsimshatsui
Kowloon, Hong Kong
(852) 27341948
Tim-S.T.Leung@hkg.dupont.com

Canada

DuPont Canada, Inc.
DuPont Fluoroproducts
P.O. Box 2200, Streetsville
7070 Mississauga Road
Mississauga, Ontario, Canada
L5M 2H3
(800) 207-0756

South America

DuPont do Brasil S/A
Fluoropolymers
Alameda Itapecuru, 506
06454-080 - Alphaville
P.O. Box 263
Barueri, Sao Paulo, Brazil
0800-171715
Produtos.Brazil@bra.dupont.com

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CAUTION: Do not use in medical applications involving permanent implantation in the human body or contact with internal body fluids or tissues. For other medical applications, see "DuPont Medical Caution Statement," H-50102.

